NOTIFICATION OF ADDENDUM ADDENDUM NO. 1 DATED 3/25/2013

Control	6250-78-001
Project	RMC - 625078001
Highway	BS0146D
County	HARRIS

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an adendum notification which details the changes and the respective proposal pages which were added and/ or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

SUBJECT: PLANS AND PROPOSAL ADDENDUMS PROJECT: RMC - 625078001 CONTROL: 6250-78-001 COUNTY: HARRIS LETTING: 04/04/2013 REFERENCE NO: 0325 PROPOSAL ADDENDUMS _ PROPOSAL COVER BID INSERTS (SH. NO.: X GENERAL NOTES (SH. NO.: SHEETS A - N _ SPEC LIST (SH. NO.: _ SPECIAL PROVISIONS: ADDED: DELETED: _ SPECIAL SPECIFICATIONS: ADDED: DELETED: _ OTHER: DESCRIPTION OF ABOVE CHANGES (INCLUDING PLANS SHEET CHANGES)

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REVISED PLAN SHEETS: 7-7G, 8, 9 & 9A. REVISED GENERAL NOTES: SHEETS A - N.

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GENERAL NOTES:

Supervision:

Plans are required. Refer questions to:

Lucio F. Ortiz, P.E., (Interim Area Engineer) Southeast Harris, Area Engineer's Office 702 FM 1959 Houston, Texas 77034 (281) 464-5500

This project will be managed by, and requests for payment addressed to:

Area Maintenance Supervisor South Harris Maintenance Office Johnny Guice 702 FM 1959 Houston, Texas 77034

General

Inspect the work site prior to bidding. To arrange for a site visit, please contact Johnny Guice at (281) 464-5541.

Notify the South Harris Maintenance Office at (281) 464-5541 by 7:30 a.m., when scheduled work is cancelled for any reason.

If fixed features require, the governing slopes shown may vary between the limits shown and to the extent determined by the Engineer.

References to manufacturer's trade name or catalog numbers are for the purpose of identification only. Similar materials from other manufacturers are permitted if they are of equal quality, comply with the specifications for this project, and are approved, except for roadway illumination, electrical, and traffic signal items.

The cost for materials, labor, and incidentals to provide for traffic across the roadway and for ingress and egress to private property in accordance with Section 7.7 of the standard specifications is subsidiary to the various bid items. Restore access roadways to their original condition upon completing construction.

Grade street intersections and median openings for surface drainage.

If a foundation is to be placed where a riprap surface or an asphalt concrete surface presently exists, use caution in breaking out the existing surface for placement. Break out no greater area than is required to place the foundation. After placing the foundation, wrap the periphery with

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0.5 in. pre-molded mastic expansion joint. Then replace the remaining portion of the broken out surface with Class A or Class C concrete or cold mix asphalt concrete to the exact slope, pattern, and thickness of the existing riprap or asphalt. Payment for breaking out the existing surface, wrapping the foundation, and replacing the surface is subsidiary to the various bid items.

Clearly mark or highlight on the shop drawings, the items being furnished for this project. Submit required shop drawings in accordance with the shop drawing distribution list shown in the note for Item 5 for review and distribution.

Procure permits and licenses, which are to be issued by the City, County, or Municipal Utility District.

General: Roadway Illumination and Electrical

Perform electrical work in conformance with the National Electrical Code (NEC) and Department standard sheets.

General: Traffic Signals

For traffic signal items, use materials from pre-qualified producers as shown on the General Services Division (GSD) of the Department's material producers list. Check the latest links on the TxDOT website for this list, including (but not limited to):

http://www.txdot.gov/txdot_library/consultants_contractors/publications/purchasing_specifications.htm under "Supplemental Specifications and Attachments." No substitutions will be allowed for materials found on this list.

General: Site Management

Mark stations every 100 ft. and maintain the markings for the project duration. Remove the station markings at the completion of the project. This work is subsidiary to the various bid items.

Record the beginning and ending stations of any no passing zones in the field before beginning the overlay. Restripe the no passing zones immediately after the overlay in the same locations, unless otherwise shown in the plans, or otherwise directed.

Do not mix or store materials, or store or repair equipment, on top of concrete pavement or bridge decks unless authorized by the Engineer. Permission will be granted to store materials on surfaces if no damage or discoloration will result.

Personal vehicles of employees are not permitted to park within the right of way, including sections closed to public traffic. Employees may park on the right of way at the Contractor's office, equipment, and materials storage yard sites.

Assume ownership of debris and dispose of at an approved location. Do not dispose of debris on private property unless approved in writing by the District Engineer.

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Control the dust caused by construction operations. For sweeping the base material in preparation for laying asphalt and for sweeping the finished concrete pavement, use one of the following types of sweepers or equal:

Tricycle TypeWayne Series 900
Elgin White Wing
Elgin Pelican

Truck Type - 4 Wheel
M-B Cruiser II
Wayne Model 945
Mobile TE-3
Mobile TE-4
Murphy 4042

General: Traffic Control and Construction

Schedule work so that the ACP placement operations follow the Seal Coat work such that the Seal Coat placed is covered by ACP the same day to reduce the hazard to the traveling public and to prevent undue delay caused by wet weather.

When design details are not shown on the plans, provide signs and arrows conforming to the latest "Standard Highway Sign Designs for Texas" manual.

General: Utilities

Consider the locations of underground utilities depicted in the plans as approximate and employ responsible care to avoid damaging utility facilities. Depending upon scope and magnitude of planned construction activities, advanced field confirmation by the utility owner or operator may be prudent. Where possible, protect and preserve permanent signs, markers, and designations of underground facilities.

If the Contractor damages or cause damage (breaks, leaks, nicks, dents, gouges, etc.) to the utility, contact the utility facility owner or operator immediately.

At least 48 hours before starting work, make arrangements for locating existing Department-owned above ground and underground fiber optic, communications, power, illumination, and traffic signal cabling and conduit. Do this by calling the Department's Houston District Traffic Signal Operations Office at 713-802-5662 to schedule marking of underground lines on the ground. Use caution if working in these areas to avoid damaging or interfering with existing facilities.

If overhead or underground power lines need to be de-energized, contact the electrical service provider to perform this work. Costs associated with de-energizing the power lines or other protective measures required are at no expense to the Department.

If working near power lines, comply with the appropriate sections of Texas State Law and Federal Regulations relating to the type of work involved.

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Perform electrical work in conformance with the National Electrical Code (NEC) and Department standard sheets.

Item 5: Control of the Work

Submit shop drawings electronically for the fabrication of items as documented in Table 1 below. Information and requirements for electronic submittals can be viewed in the "Guide to Electronic Shop Drawing Submittal" which can be accessed through the following web link, ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/bridge/e_submit_guide.pdf. References to 11 in. x 17 in. sheets in individual specifications for structural items imply electronic CAD sheets.

Table 1
2004 Construction Specification Required Shop/Working Drawing Submittals

	2004 Construction Specification Requ	irea Snop/w	orking Drav		S
Spec Item No.'s	Product	Submittal Required	Approval Required (Y/N)	Contractor/ Fabricator P.E. Seal Required	Reviewing Party
7.8	Construction Load Analyses	Υ	Υ	Υ	В
400	Excavation and Backfill for Structures (cofferdams)	Υ	N	Υ	Α
403	Temporary Special Shoring	Υ	N	Υ	В
420	Formwork/Falsework	Υ	N	Υ	Α
423	Retaining Walls, (calcs req'd.)	Υ	Y	Υ	С
425	Optional Design Calculations (Prstrs Bms)	Υ	Υ	Υ	В
425	Prestr Concr Sheet Piling	Υ	Y	N	В
425	Prestr Concr Beams	Υ	Υ	N	В
425	Prestr Concr Bent	Υ	Υ	N	В
426	Post Tension Details	Υ	Y	N	В
434	Elastomeric Bearing Pads (All)	Υ	Υ	N	В
441	Bridge Protective Assembly	Υ	Υ	N	В
441	Misc Steel (various steel assemblies)	Υ	Υ	N	В
441	Steel Pedestals (bridge raising)	Υ	Υ	N	В
441	Steel Bearings	Υ	Υ	N	В
441	Steel Bent	Υ	Y	N	В
441	Steel Diaphragms	Υ	Υ	N	В
441	Steel Finger Joint	Υ	Y	N	В
441	Steel Plate Girder	Υ	Υ	N	В
441	Steel Tub-Girders	Υ	Υ	N	В
441	Erection Plans	Υ	N	Y	Α
449	Sign=Structure Anchor Bolts	Υ	Υ	N	Т
450	Railing	Υ	Υ	N	Α
462	Concrete Box Culvert	Υ	Y	N	С
462	Concrete Box Culvert (Alternate Designs Only,calcs reqd.)	Υ	Υ	Υ	В
464	Reinforced Concrete Pipe (Jack and Bore only; ONLY when requested)	Y	Y	Y	А
465	Pre-cast Junction Boxes, Grates, and Inlets	Υ	Υ	N	А
465	Pre-cast Junction Boxes, Grates, and Inlets (Alternate Designs Only, calcs req'd.)	Y	Υ	Y	В
466	Pre-cast Headwalls and Wingwalls	Υ	Υ	N	Α
467	Pre-cast Safety End Treatments	Υ	Y	N	Α

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495	Raising Existing Structure (calcs reqd.)	Υ	Υ	Y	В
610	Roadway Illumination Supports (Non-	Υ	Υ	Y	Т
010	Standad only, cals reqd.)	'	'	'	'
613	High Mast Illumination Poles (Non-standard		Y	Υ	Т
	only, calcs reqd.)	Y	•	·	•
627	Treated Timber Poles	Υ	Y	N	Т
644	Special Non-Standard Supports	Υ	Υ	Y	Т
647	(Bridge Mounts, Barrier Mounts, Etc.) Large Roadside Sign Supports	Υ	Y	Y	Т
0-17	Cantilever Sign Structure Supports -		'	'	'
650	Alternate Design Cacls.	Υ	Υ	Y	Т
650	Sign Structures	Υ	Υ	N	Т
652	Highway Sign Lighting Fixtures	Υ	Y	N	Т
654	Sign Walkways	Υ	Y	N	Т
680	Installation of Highway Traffic Signals	Υ	Y	N	Т
682	Vehicle and Pedestrian Signal Heads	Υ	Y	N	Т
684	Traffic Signal Cables	Υ	Y	N	Т
685	Roadside Flashing Beacon Assemblies	Υ	Υ	N	T
686	Traffic Signal Pole Assemblies (Steel) (Non-	Υ	Υ	Υ	Т
000	Standard only)	ı	ľ		•
687	Pedestal Pole Assemblies	Υ	Υ	N	Т
688	Detectors	Υ	Υ	N	Α
784	Repairing Steel Bridge Members	Υ	Υ	Υ	В
SS	Prestr Concr Crown Span	Υ	Υ	N	В
SS	Sound Barrier Walls	Υ	Υ	N	В
SS	Camera Poles	Υ	Υ	Υ	TMS
SS	Pedestrian Bridge (Calcs req'd.)	Υ	Υ	Υ	В
SS	Screw-In Type Anchor Foundations	Υ	Υ	N	Т
SS	Fiber Optic/Communication Cable	Υ	Y	N	TMS
SS	Spread Spectrum Radios for Signals	Υ	Υ	N	T
SS	VIVDS System for Signals	Υ	Υ	N	Т
SS	CTMS Equipment	Υ	Υ	N	TMS

Key to Reviewing Party

A - Area Office		
Area Office	Email Address	
Brazoria Area Office	HOU-BRZAShpDrwgs@txdot.gov	
Fort Bend Area Office	HOU-FBAShpDrwgs@txdot.gov	
Galveston Area Office	HOU-GALVAShpDrwgs@txdot.gov	
Montgomery Area Office	HOU-MONTAShpDrwgs@txdot.gov	
North Harris Area Office	HOU-NHAShpDrwgs@txdot.gov	
Southeast Area Area Office	HOU-SEHAShpDrwgs@txdot.gov	
Traffic Systems Construction Office	HOU-TSCShpDrwgs@txdot.gov	
West/Central Harris Area Office	HOU-WWCHAOShpDrwgs@txdot.gov	
B - Bridge Engineer		
Bridge Design (TxDOT)	HOU-BrgShpDrwgs@txdot.gov	
		
C - Construction Office		

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Construction	HOU-ConstrShpDrwgs@txdot.gov	
Laboratory	HOU-LabShpDrwgs@txdot.gov	
T - Traffic Engineer		
Traffic Operations	HOU-TrfShpDrwgs@txdot.gov]
TMS – Traffic Management System		
Computerized Traffic Management Systems (CTMS)	HOU-CTMSShpDrwgs@txdot.gov	

Item 7: Legal Relations and Responsibilities

This project does not require a U.S. Army Corps of Engineers (USACE) Section 404 Permit before letting, but if a permit is needed during construction, assume responsibility for preparing the permit application. Submit the permit application to the Department's District Environmental Section for approval. Once the permit application is approved, the Department will submit it to the USACE. Assume responsibility for the requested revisions, in coordination with the Department's District Environmental Section.

Maintain the roadway slope stability. Maintaining slope stability is subsidiary to the various bid items.

Item 8: Prosecution and Progress

Do not begin work on this project prior to June 3, 2013. (Special Provision 008---063)

Working days will be computed and charged based on a *standard* workweek in accordance with Section 8.3.C.2.b.

The Lane Closure Assessment Fee is \$ 100. This fee applies to the Contractor for closures or obstructions that overlap into restricted hour traffic for each hour or portion thereof, per lane, regardless of the length of lane closure or obstruction. For Restricted Hours subject to Lane Assessment Fee refer to the Item, "Barricades, Signs, and Traffic Handling."

Item 134: Backfilling Pavement Edges

Quantity by station includes ONLY the non-curbed side of the roadway.

The Contractor has the option of selecting the type of backfill material consisting of Reclaimable Asphalt Pavement (RAP), Flex Base, or Crushed Concrete provided that it meets the requirements listed below.

If using salvaged asphalt concrete pavement, size it so that all the material, passes the 2-in. sieve. Use RAP that does not contain deleterious material such as clay or organic material.

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Flex Base must meet the requirements of Item 247, Type A, Grade 1. Department Test Method Tex-117-E will not be required.

Crushed concrete must meet the requirements of Item 247, Grade 1. Department Test Methods Tex-116-E and Tex-117-E will not be required.

Place emulsified asphalt (SS-1, CSS-1, or CSS-1H) at an application rate of 0.25 gal/sq. yard.

Item 292: Asphalt Treatment (Plant-Mixed) Item 3267: Dense-Graded Hot-Mix Asphalt (Small Quantity)

Handle the RAP generated by this project as shown in the notes under Item 354.

Item 292: Asphalt Treatment (Plant-Mixed)

If using the iron ore topsoil as the primary aggregate, meaning 80 percent or more by weight of the total mixture, the requirements for the water susceptibility test are waived.

Mixtures containing the iron ore topsoil are exempted from test methods TEX-217-F (Part I, separation of deleterious material and Part II, decantation test for coarse aggregate) and TEX-203-F (Sand Equivalent Test).

Assume responsibility for proportioning the materials entering the asphalt mixture, regardless of the type of plant used.

Furnish the mix designs for approval.

Compact the courses to a minimum density of 95 percent of the maximum density as determined using test method TEX-126-E.

If blending the materials, perform the Wet Ball Mill test for the composite aggregate.

Form the asphalt material from 3.5 to 7 percent of the mixture by weight.

For nominal aggregate size less than 0.5 in., design the mix in accordance with test method TEX 204-F. The minimum stability is 30 percent with a laboratory molded density of 96 percent plus or minus 1.5 percent.

Item 318: Hot Asphalt-Rubber Surface Treatments

Placing surface treatments is limited to the period of May 1 to September 15, inclusive, unless written approval is obtained to extend the placement period if weather conditions warrant an extension.

The asphalt application rate shown on the "Basis of Estimate" is an average rate for calculating asphalt quantities. Vary the rate based on the pavement conditions and other factors such as the type and grade of aggregate used, weather, and traffic.

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Item 351: Flexible Pavement Structure Repair

Use asphalt stabilized base for the base repair material.

For base repair, place the asphalt stabilized base in compacted lifts of 4 in. maximum, unless otherwise directed.

Item 354: Planing and Texturing Pavement

Stockpile the excess material, after use in other items as allowed by the Specifications, at The Department's Maintenance yard located at 702 FM 1959, as directed by Mr. Larry Whittington at 281.464.5540.

Keep the removed depth as uniform as possible during each removal pass if the pavement depth being removed is composed of different asphalt layers. Stockpile the RAP of differing types of quality separately by its intended use such as for asphalt treatment, cement treatment, lime treatment, or asphalt concrete pavement (level up). Break, crush, or mill the stockpiled materials so that 100 percent passes the 2-in. sieve.

Verify the depth of asphalt pavement to be removed before beginning the removal.

Item 502: Barricades, Signs, and Traffic Handling

Use a traffic control plan for handling traffic through the various phases of construction. Follow the phasing sequence unless otherwise agreed upon by the Area Engineer and the Project Manager. Ensure this plan conforms to the latest "Texas Manual on Uniform Traffic Control Devices" and the latest Barricade and Construction (BC) Standard Sheets. The latest versions of Work Zone Standard Sheets WZ (BTS-1) and WZ (BTS-2) are in the traffic control plan for the signal installations.

Submit changes to the traffic control plan to the Area Engineer. Provide a layout showing the construction phasing, signs, striping, and signalizations for changes to the original traffic control plan.

Furnish and maintain the barricades and warning signs, including the necessary temporary and portable traffic control devices, during the various phases of construction. Place and construct these barricades and warning signs in accordance with the latest "Texas Manual on Uniform Traffic Control Devices" for typical construction layouts.

Cover work zone signs when work related to the signs is not in progress, or when any hazard related to the signs no longer exists.

Keep the delineation devices, signs, and pavement markings clean. This work is subsidiary to the Item, "Barricades, Signs, and Traffic Handling."

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If a section is not complete before the end of the workday, pull back the base material to the existing pavement edge on a 6H: 1V slope. Edge drop-offs during the hours of darkness are not permitted.

Before detouring traffic onto the mainlane shoulders, remove dirt, debris, vegetation, and other deleterious material from the surface of the shoulders. Appropriately sign the detour in an approved manner. This work is subsidiary to the various bid items.

Do not mount signs on drums or barricades, except those listed in the latest Barricades and Construction standard sheets.

Use traffic cones for daytime work only. Replace the cones with plastic drums during nighttime hours.

Use shadow vehicles with Truck Mounted Attenuators (TMA) for lane closures during construction.

Do not reduce the existing number of lanes open to traffic except as shown on the following time schedule:

C	ne	Lane	Closure

Day	Daytime Closure	Nighttime Closure	Restricted Hours Subject
	Hours	Hours	to Lane Assessment Fee
Monday	9AM-4PM	8PM-5AM	5AM-9AM
Through			& 4PM-8PM
Friday			
Saturday	N/A	N/A	N/A
Through			
Sunday			

The above times are approved for the traffic control conditions listed. The Area Engineer may approve other closure times if traffic counts warrant. The Area Engineer may reduce the above times for special events.

Law enforcement assistance will be required for this project and is expected to be required for major traffic control changes and lane closures. Coordinate with local law enforcement and arrange for law enforcement as directed or agreed by the Engineer. Before payment will be made, complete the "Daily Report on Law Enforcement Force Account Work" (Form 316), provided by the Department and submit daily invoices that agree with this form for any day during the month in which approved services were provided.

Provide full-time, off-duty, uniformed, certified peace officers, as part of traffic control operations. The peace officers must be able to show proof of certification by the Texas Commission on Law Enforcement Officers Standards. The cost of the officers is paid for on a force account basis.

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Provide 2 portable changeable message signs as shown on the Traffic Control Plan and the Special Specification Item 6834, "Portable Changeable Message Signs."

Use Uneven Lane Signs (WZ (UL) -03) during resurfacing operations for elevation differences between adjacent lanes of greater than 1 in.

Item 585: Ride Quality for Pavement Surfaces

To eliminate the need for corrective action due to excessive deviations in the final surface layers, exercise caution to ensure satisfactory profile results in the intermediate paving layers (mixture).

Milling will not be allowed as a corrective action for excessive deviations in the final surface layer of hot-mix asphalt.

For asphalt slotted curb sections, use Surface Test Type B and Pay Adjustment Schedule 3 for all lanes.

For all other roads (cross streets and intersections), use Surface Test Type A.

Item 618: Conduit

Item 620: Electrical Conductors Item 628: Electrical Services

If the specifications for electrical items require UL-listed products, this means UL-listed or CSA-listed.

Item 618: Conduit

When backfilling bore pits, ensure that the conduit is not damaged during installation or due to settling backfill material. Compact select backfill in 3 equal lifts to the bottom of the conduit; or if using sand, place it 2 in. above the conduit. Ensure backfill density is equal to that of the existing soil. Prevent material from entering the conduit.

Construct bore pits a minimum of 5 ft. from the edge of the base or pavement. Close the bore pit holes overnight.

Unless shown on the plans, install underground conduit a minimum of 24 in. deep. Install the conduit in accordance with the latest National Electrical Code (NEC) and applicable Department standard sheets. Place conduit under driveways or roadways a minimum of 24 in. below the pavement surface.

If using casing to place bored conduit, the casing is subsidiary to the conduit.

Item 620: Electrical Conductors

Test each wire of each cable or conductor after installation. Incomplete circuits or damage to the wire or the cable are cause for immediate rejection of the entire cable being tested. Remove and

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replace the entire cable at no expense to the Department. Also test the replacement cable after installation.

When pulling cables or conductors through the conduit, do not exceed the manufacturer's recommended pulling tensions. Lubricate the cables or conductors with a lubricant recommended by the cable manufacturer.

Ensure that circuits test clear of faults, grounds, and open circuits.

Split bolt connectors are allowed only for splices on the grounding conductors.

Item 624: Ground Boxes

The ground box locations are approximate. Alternate ground box locations may be used as directed, to avoid placing in sidewalks or driveways.

Ground metal ground box covers. Bond the ground box cover and ground conductors to a ground rod located in the ground box and to the system ground.

Ground the existing metal ground box covers as shown on the latest standard sheet ED (3), III, B, 4 through 6.

During construction and until project completion, provide personnel and equipment necessary to remove ground box lids for inspection. Provide this assistance within 24 hours of notification.

Construct concrete aprons in accordance with the latest standard sheet ED (3). Make the depth of the concrete apron the same as the depth of the ground box, except for Type 1 and Type 2 ground boxes. For Type 1 or Type 2 ground boxes, construct the concrete apron in accordance with details shown on the "Ground Box Details Installations" standard.

Item 628: Electrical Services

Verify and coordinate the electrical service location with the engineering section of the appropriate utility district or company.

Identify the electrical service pole with an address number assigned by the Utility Service Provider. Provide 2-in. numerals visible from the highway. Provide numbers cut out aluminum figures nailed to wood poles or painted figures on steel poles or service cabinets.

Item 662: Work Zone Pavement Markings

At the end of each day's work, mark roadways that remain open to traffic during construction operations with standard pavement markings, in accordance with the latest "Texas Manual on Uniform Traffic Control Devices."

Do not use raised pavement markers as optional work zone pavement markings on final asphalt surfaces.

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For transition lane lines and detour lane lines, use raised pavement markers as shown for solid lines on the latest Barricade and Construction standard sheet for "Work Zone Pavement Marking Details."

Item 662: Work Zone Pavement MarkingsItem 666: Reflectorized Pavement Markings

Use Type III glass beads for thermoplastic pavement markings.

Use a 0.100 in. (100 mil) thickness for thermoplastic pavement markings, measured to the top of the thermoplastic, not including the exposed glass beads.

For roadways with asphalt surfaces to be striped with work zone or permanent thermoplastic markings, the Contractor has the option to apply paint and beads markings for a maximum 30-day period until placing the thermoplastic markings, or until starting the succeeding phase of work on the striped area. Maintain the paint and beads markings, at no expense to the Department, until placing the thermoplastic markings or starting the succeeding phase of work on the striped area. The work zone markings, whether paint and beads or thermoplastic, are paid under the Item, "Work Zone Pavement Markings" and the markings are paid for only once for the given phase of construction.

If using paint and bead markings as described above, purchase the traffic paint from the open market.

If the Type II markings become dirty and require cleaning by washing, brushing, compressed air, or other approved methods before applying the Type I thermoplastic markings, this additional cleaning is subsidiary to the Item, "Reflectorized Pavement Markings."

Establish the alignment and layout for work zone striping and permanent striping.

Stripe roadways before opening them to traffic.

Place pavement markings under these items in accordance with details shown on the plans, the latest "Texas Manual on Uniform Traffic Control Devices," or as directed.

When design details are not shown on the plans, provide pavement markings for arrows, words, and symbols conforming to the latest "Standard Highway Sign Designs for Texas" manual.

Item 672: Raised Pavement Markers

If other operations are complete on the project and if the curing time period is not yet elapsed, the contract time will be suspended until the curing is done.

Before placing the raised pavement markers on concrete pavement, blast clean the surface using an abrasive-blasting medium. This work is subsidiary to the Item, "Raised Pavement Markers."

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Provide epoxy adhesive that is machine-mixed or nozzle-mixed and dispensed. Equip the machine or nozzle with a mechanism to ensure positive mix measurement control.

Item 678: Pavement Surface Preparation for Markings

Do not blast clean asphalt concrete pavement. Clean asphalt concrete pavement as required under the applicable specifications or as directed.

On new concrete pavement or on existing concrete pavement when placing a new stripe on a new location, remove the curing compounds and contamination from the pavement surface by flail milling or as directed. In addition, air-blast the surface with compressed air just before placing the new stripe.

On existing concrete pavement when placing a new stripe on an existing location, after removing the existing stripe under the Item, "Eliminating Existing Pavement Markings and Markers," airblast the surface with compressed air just before placing the new stripe.

Perform air blasting with a compressor that is capable of generating air at a minimum of 100 psi using 5/16 in. or larger hosing for the air blast (equipment should have sufficient capacity to remove contaminants but not damage the pavement surface). Do not clean concrete pavement by grinding.

Item 688: Pedestrian Detectors and Vehicle Loop Detectors

Provide a black tube loop detector wire as specified in the "International Municipal Signal Association, Inc." (IMSA) Specification No. 51-7, 1997.

If the loop sealant supplied by the Contractor is not on the Department's pre-qualified product list, before applying the sealant provide a 5-gal. container of loop sealant for testing.

Item 1122: Temporary Erosion, Sedimentation and Environmental Controls

The use of hay bales is not permitted as Storm Water Pollution Prevention Plan (SW3P) measures.

The Storm Water Pollution Prevention Plan (SW3P) consists of temporary erosion control measures needed and provided for under this Item. The disturbed area is less than one acre and use of erosion control measures is not anticipated. If physical conditions encountered at the job site require necessary controls, BMP installation, maintenance, and removal will be paid as extra work on a force account basis per Articles 4.2 and 9.5. Since the disturbed area is less than 5 acres, a "Notice of Intent" (NOI) is not required.

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Item 3267: Dense-Graded Hot Mix Asphalt (Small Quantity)

Taper the asphalt concrete pavement at the beginning and ending points.

Use a maximum 6H:1V slope for the asphalt concrete pavement edge.

Where the 6H:1V ACP edge taper extends over onto the unsurfaced shoulders, blade off the loose existing shoulder material to provide a solid base for the outside taper edge. After placing the ACP overlay, blade this material back against the edge taper. This work is subsidiary to the various bid items.

The stockpile will be the point of sampling of coarse aggregate for test method TEX-217-F (Part II, decantation).

Place the asphalt concrete pavement in courses as shown on the typical sections.

Do not use petroleum-based solvents in the beds of hot mix asphalt delivery vehicles.

Dilution of tack coat is not allowed.

Do not use Surface Aggregate Classification (SAC) C for this project.

For determining the Asphalt Content, only ignition ovens will be allowed.

Basis of Estimate

Item	Description	Limit and Rate	Unit
134	Backfilling Pavement Edges	0.25 Gal. / Sq. Yd.	STA
292*	Asphalt Treatment (Plant-Mixed)	110 Lb. / Sq. YdIn.	TON
	Asphalt	5 % by weight	
	Aggregate	95 % by weight	
318	Surface Treatments (A-R Binder)		
	• Asphalt (Rubber)	0.55 Gal/ Sq. Yd.	GAL
	Aggregate	1/100 Cu. Yd. / Sq. Yd.	CY
3267	Dense-Graded Hot Mix Asphalt (Small	110 Lb. / Sq. YdIn.	TON
	Quantity)	6 % by weight	
	Asphalt	94 % by weight	
	Aggregate		

^{*} For Contractor's information only.